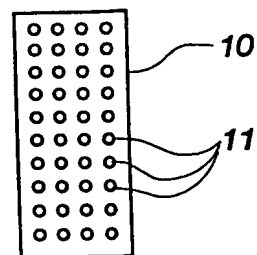
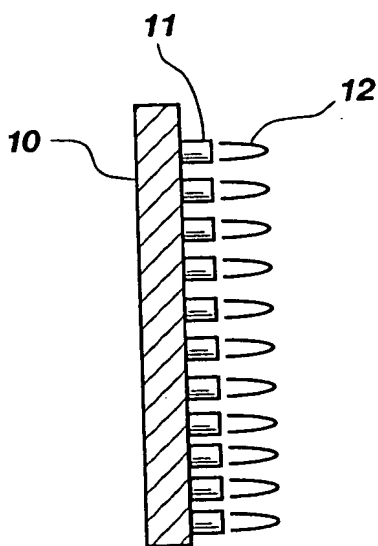


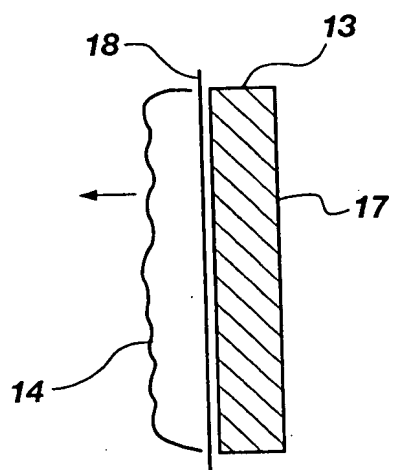
**Fig. 1a**



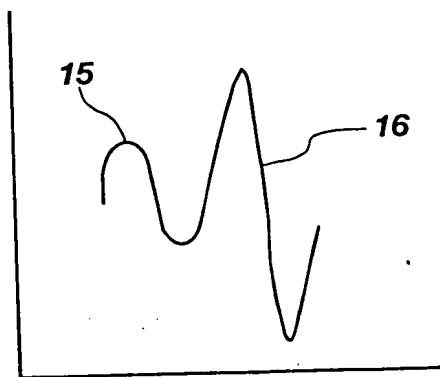
**Fig. 1b**



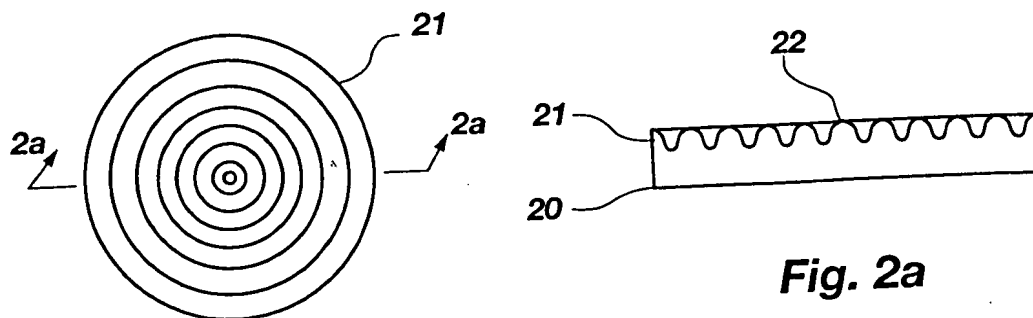
**Fig. 1c**



**Fig. 1d**

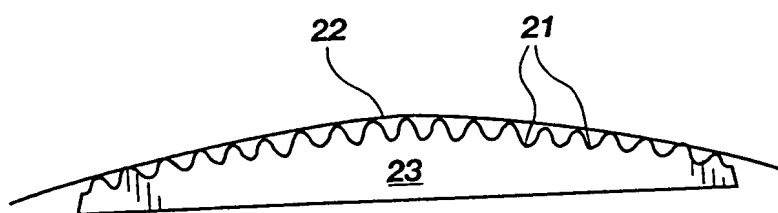


**Fig. 1e**

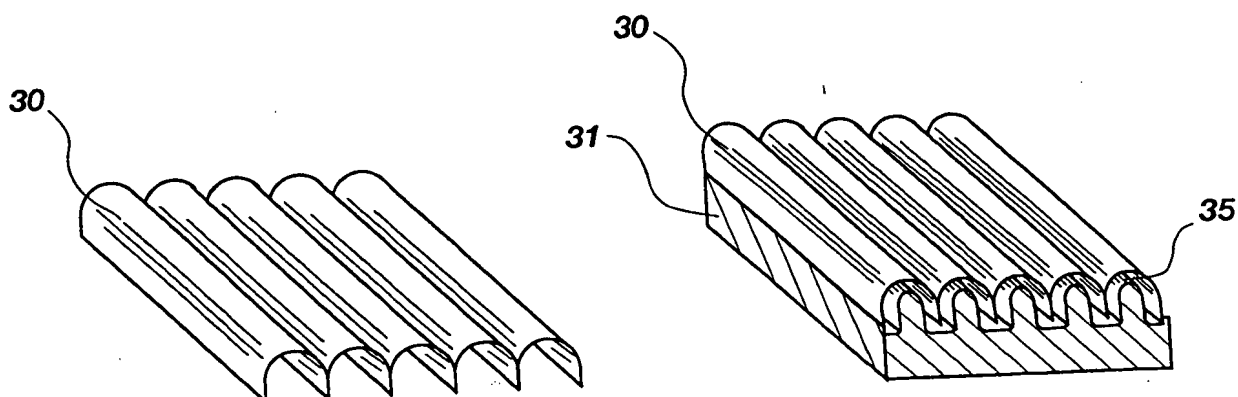


**Fig. 2**

**Fig. 2a**



**Fig. 2b**

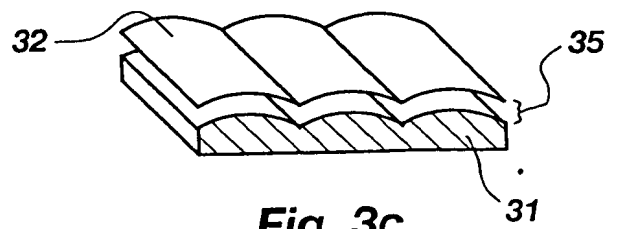


**Fig. 3**

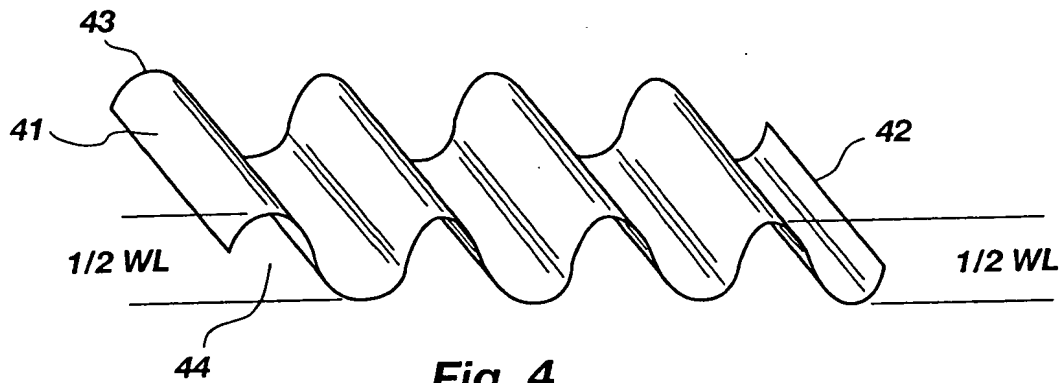
**Fig. 3a**



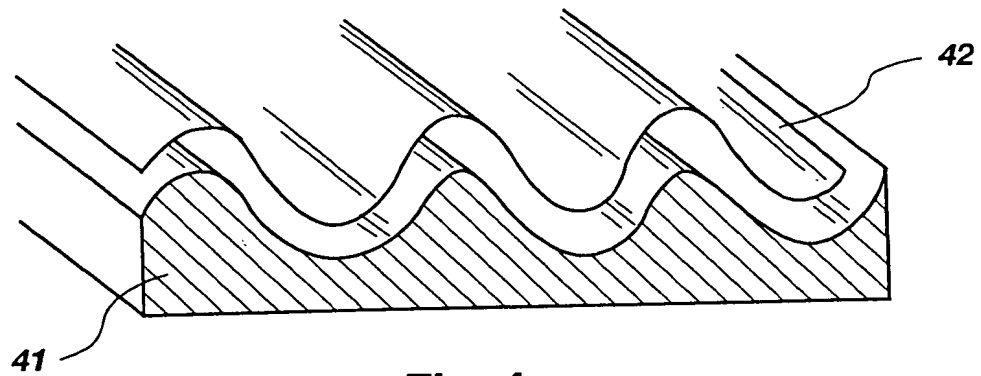
**Fig. 3b**



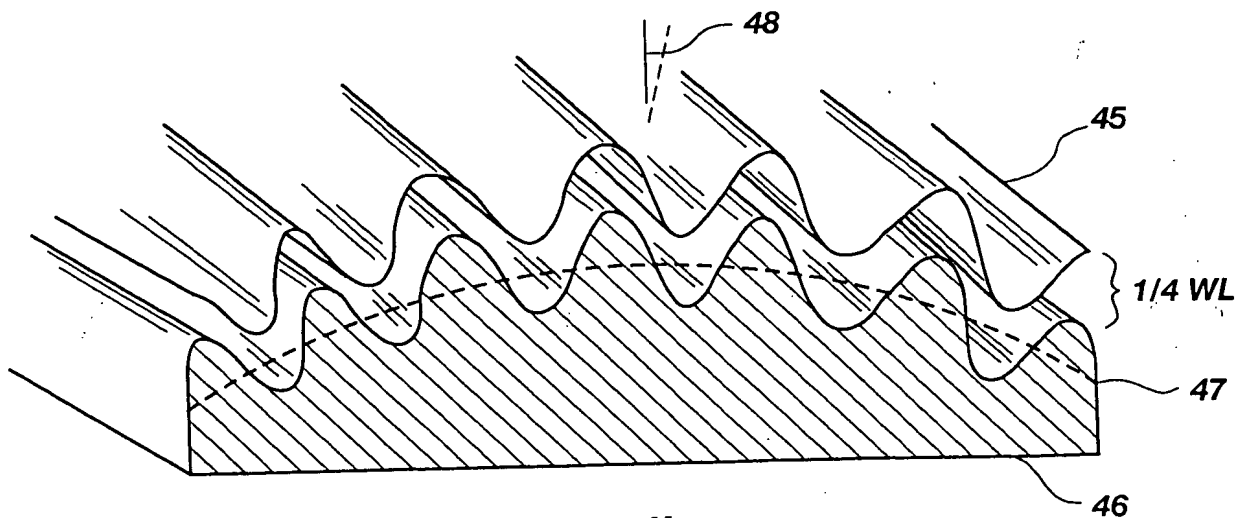
**Fig. 3c**



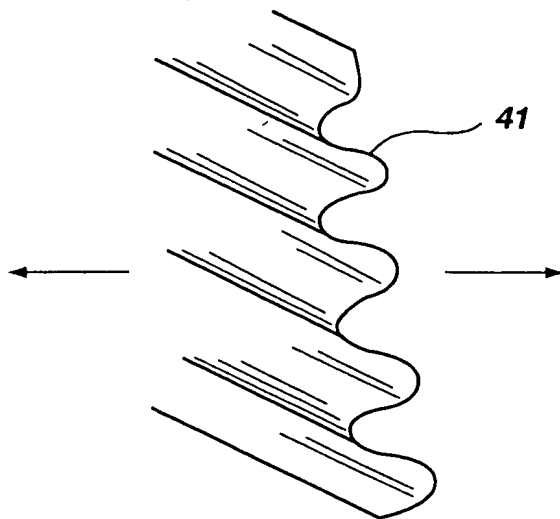
**Fig. 4**



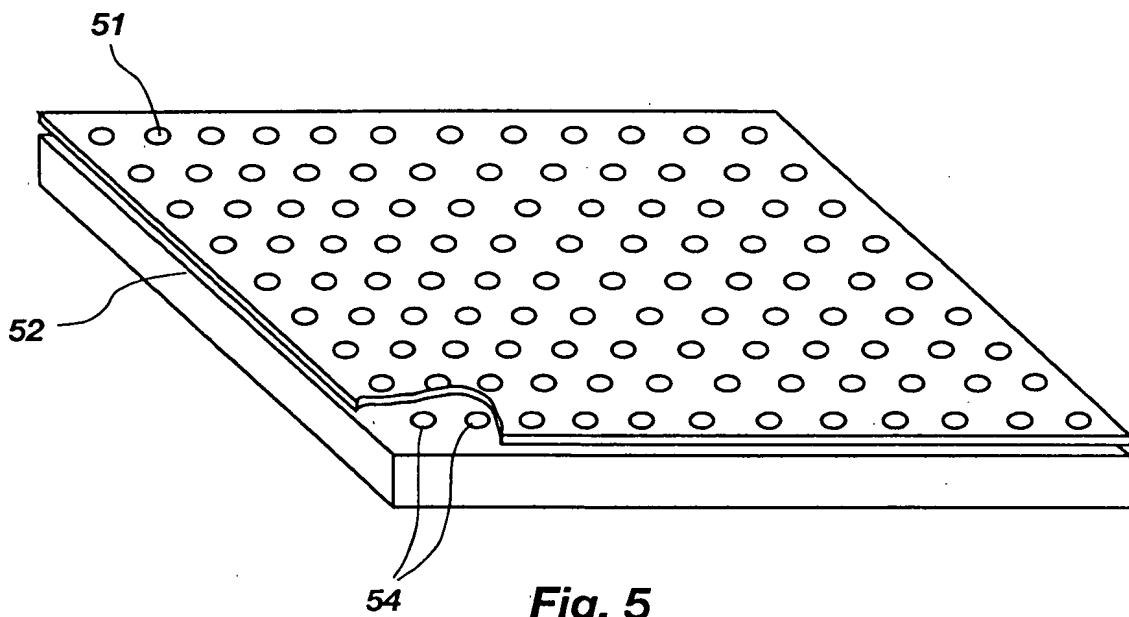
**Fig. 4a**



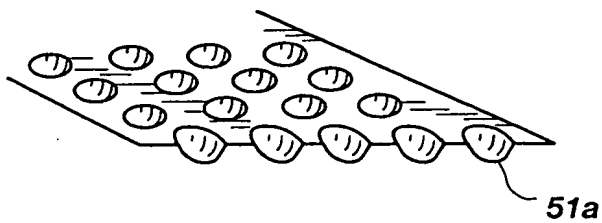
**Fig. 4b**



**Fig. 4c**



**Fig. 5**



**Fig. 5a**



**Fig. 5b**

fig 1

Jim Cuts  
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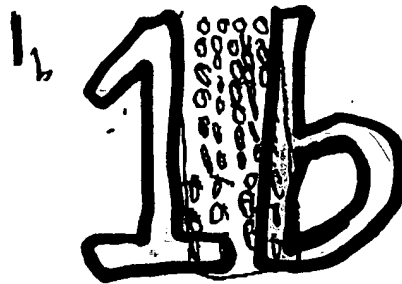
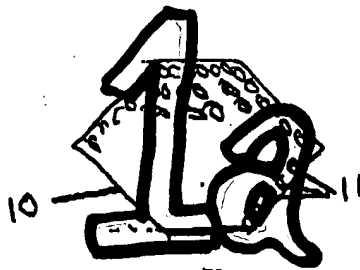


fig 2

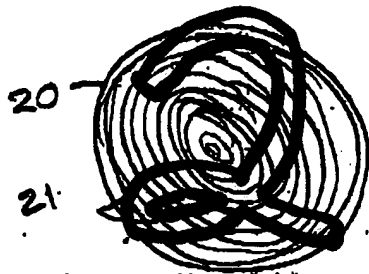
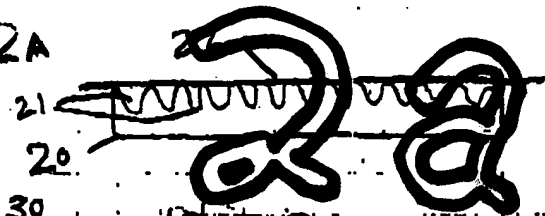


fig 2A



30

fig 3



31



33

fig 4

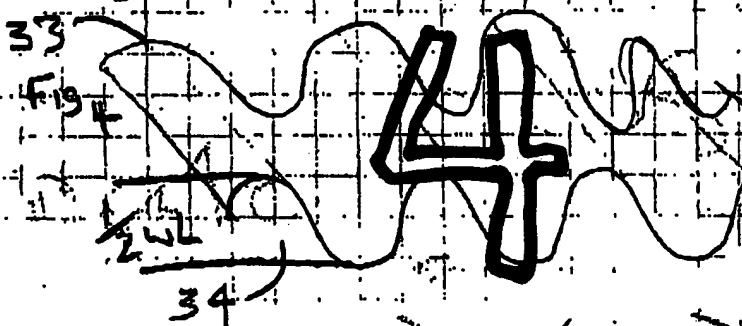
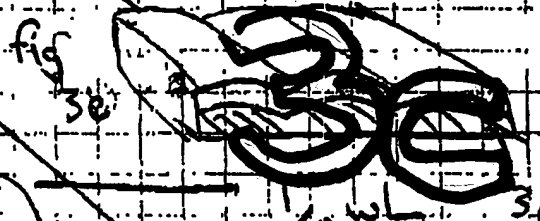


fig 3b



34

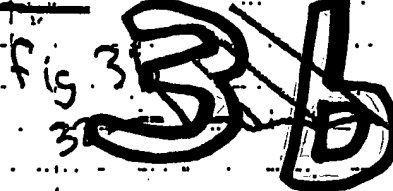
4a

1/2 WL



33

fig 3b



1/4 WL

33

fig 4b

1/4 WL



Fig 3



Fig 4a

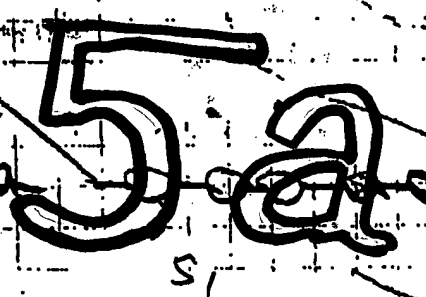


Fig 4b

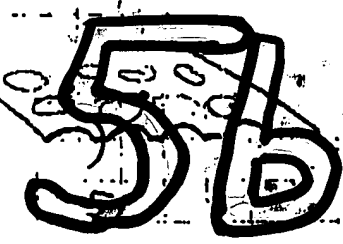


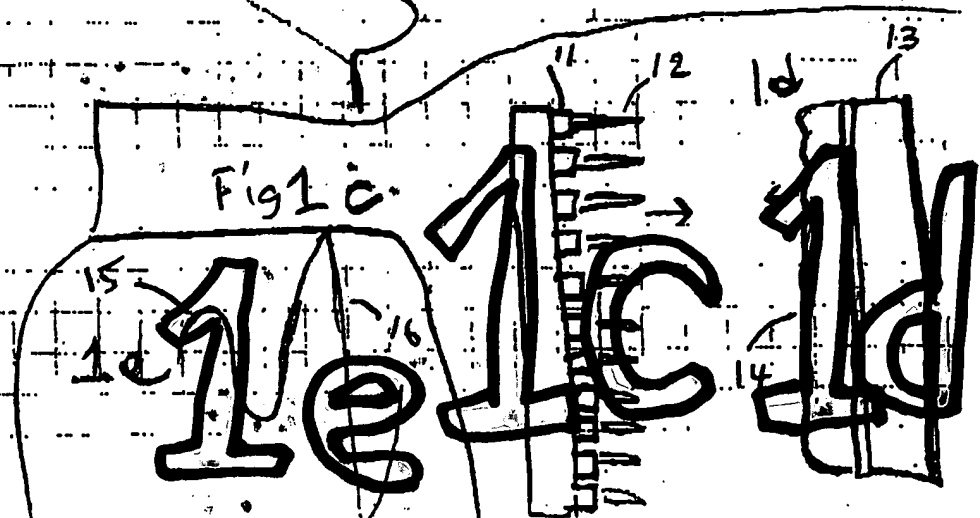
Fig 4c

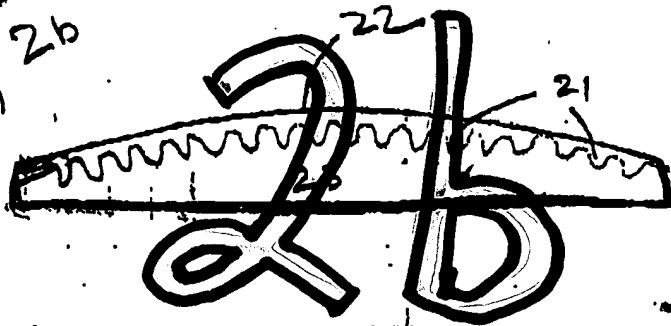
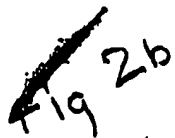


Jim Cox

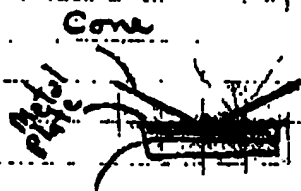
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Fig 1c





curved Esl barkplate



## Ceramic Piezo materials

P1230  
bi-morph or bender

Non parametric. Same as